

## عنوان مقاله:

Finite Element Modeling of Pullout Test on Geogrid Embedded in Pluviated and Compacted layer of Sand

## محل انتشار:

اولین کنفرانس ملی مهندسی ژئوتکنیک (سال: 1392)

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## نویسندگان:

M.R Abdi - Associate Professor, Faculty of Civil Engineering, KNT University, Tehran, Iran

A.R Zandieh - PhD Student, Faculty of Civil Engineering, KNT University, Tehran, Iran

## خلاصه مقاله:

Reinforcements like bars, strips, textiles and grids are used for the reinforcement of soil walls, but the use of grids type of reinforcements is still under consideration and there is still a need of study the probable use of grids reinforcement in reinforced soil retaining walls. Pullout test is commonly used to predict actual field pullout behavior of reinforcements. In this paper, pullout test modeled with geogrid reinforcements embedded sand, clay and clay with thin layers of sand, under five different normal pressures of 5, 25, 50, 75 kPa and 100 kPa. Finite element method (Plaxis V8) is used to compare the pullout behavior results. Normal pressures modeled and an optimum sand layer thickness was determined. Effect of sand layers combined with the geogrid reinforcement increased with increasing in normal pressures. The improvement was more pronounced at higher normal pressures. Test results indicate that provision of thin layers of sand on both sides of the geogrid is very effective in improving the pullout strength

## کلمات کلیدی:

Numerical Modeling (Plaxis V8), Geogrid, Clay, Sand, Pullout test

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/228431>

